## **Ratio of Staff to Managers in City Government**

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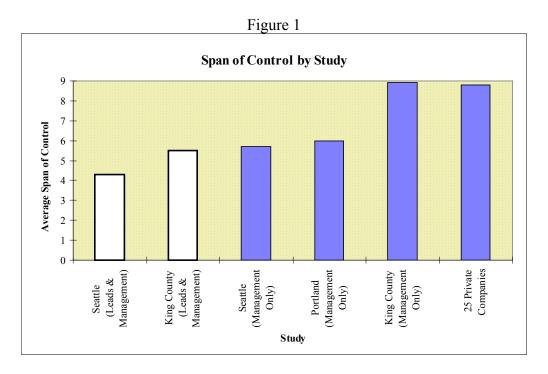
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### **Executive Summary**

#### Ratio of Staff to Managers in City Government

The ratio of staff to managers and the number of layers of management together determine the way organizations delegate tasks to units and sub-units. Because most organizational structures evolve over time, many organizations can substantially increase their efficiency and effectiveness by systematically and thoughtfully redesigning their structure. No ideal structure fits all organizations, and management experts agree that determining the appropriate number of staff per manager must include careful understanding of and balance between the purposes and characteristics of a particular organization. However, they also believe higher ratios of staff to managers are more efficient than lower ratios. Many organizations have recently restructured or are restructuring to increase their spans.

Seattle's overall average ratio of staff to managers is 5.9. This is lower than those found in the recent studies of other organizations shown in Figure 1.



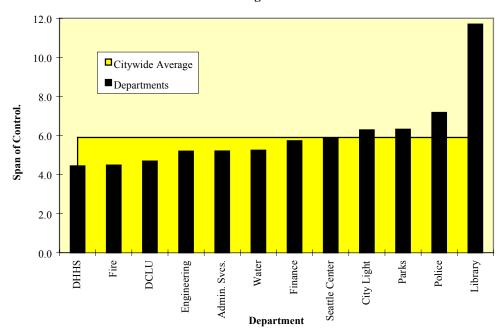
The average span of control for the 12 City departments we studied ranged from 4.4 to 11.7. Figure 2 compares the span of these departments to the Citywide average.

<sup>&</sup>lt;sup>1</sup> To develop this average we studied 9,734 permanent part- and full-time positions in City government -- approximately 90 percent of total staffing.

## **Executive Summary**

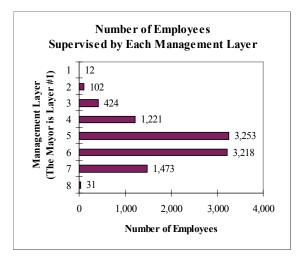
Figure 2

# Department Spans of Control Counting Leads as Non-Management Staff



Seattle has a maximum of eight layers of management, and 81.9% (7,975 employees) of the City's workforce is managed by five or more management layers. Figure 3 shows the number of employees supervised by each management layer.

Figure 3



## **Executive Summary**

Seattle's ratio of staff to managers is not necessarily an indication that the City is over-managed. However, it does suggest that the City could benefit from a thorough, systematic review of its management positions and the formal and informal policies which influence the number of staff per manager. The policies include:

- investing in people;
- separating compensation from supervision;
- communicating clearly with employees;
- reviewing positions of working supervisor;
- adding more flexibility to layoff order; and
- providing appropriate fiscal incentives.

Seattle has already begun to embrace the new structures and culture for which other organizations are striving. The Mayor's Special Task Force on the City Performance Framework, in its publication, <u>Seattle Works</u>, endorses many policies which complement flattening the City's organizational structure. The Personnel Department is also working on several initiatives which will help the City achieve a new management culture.

### **Purpose**

Reinventing government and re-engineering the corporation are two broad concepts guiding many public and private organizations as they seek to achieve dramatic improvements in their performance. Organizations are devising many new techniques as well as updating and renewing old techniques to revitalize and improve. These techniques include developing performance measures, empowering employees through self-directed work teams, and increasing internal and external competition.

Restructuring by modifying the number of layers of management and the ratio of staff to managers (span of control) is a technique many executives are using to fine-tune their organizations. The span of control and the layers of management in an organization determine the way the organization delegates tasks to organizational units and sub-units. Because the structure of most organizations has evolved over time rather than arising from systematic planning, many organizations find they can increase their efficiency and effectiveness by thoughtfully redesigning their structure.

Evaluating the ratio of staff to managers and the number of management layers can play a significant role in an organization's effort to reinvent and re-engineer itself. We developed this report to help City managers and City policy makers start to evaluate the City's organizational structures. In particular, we:

- identify work factors which influence spans of control and layers of management;
- identify and document existing ratios of staff to managers and number of layers of management in the City;
- compare Seattle's management structure to those of other public and private organizations, and
- identify policy changes Seattle can make to support broader spans of control.

# Scope and Methodology

We conducted our work between May and December 1995 in accordance with Government Auditing Standards.\* The study includes information about the City departments of more than 175 budgeted full-time equivalent employees, except for the Seattle Municipal Court. These are:

- Department of Administrative Services (Administrative Services);
- Department of Construction and Land Use (DCLU);
- Department of Finance;
- Department of Housing and Human Services (DHHS);
- Department of Parks and Recreation (Parks);
- Fire Department;
- Police Department;
- Seattle Center;
- Seattle City Light;
- Seattle Engineering Department (Engineering);
- Seattle Public Library (Library); and, the
- Water Department.

To determine the ratio of staff to managers for each of these departments, we collected, updated, and revised their organizational charts, then translated them into a spreadsheet format. These spreadsheets are a "snapshot" of City government during the summer of 1995. Appendix A describes in detail the methodology used to calculate spans of control and number of management layers.

To better understand the factors which influence the ratio of staff to managers, we:

- reviewed prominent management literature (see bibliography in Addendum E);
- interviewed managers in several participating departments, including the Personnel Department; and,

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<sup>\*</sup> We followed GAS with the exception of a peer review, which we will have in 1997.

 reviewed the organizational charts we collected from departments.

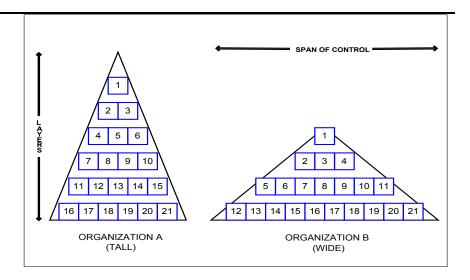
We also collected information on ratios from various organizations outside the City of Seattle. This information varied greatly in consistency. Because of the staff time needed to make this information comparable to City of Seattle information, we limited our use of this material to King County (Washington), Portland (Oregon), and a study of private corporations. While we state that Seattle's span of control is lower than those in these studies, we did not evaluate qualitative factors which may have affected the apparent difference in spans.

### **Background**

"Span of control" and "layers of management" are terms which describe how an organization is managed. Span of control refers to the number of subordinates which report to a manager. For organizations, the average span of control is the ratio of all employees to management staff. The count of layers of management in an organization is the maximum number of layers of management in that organization. Flat organizations have broad spans and few layers. Tall organizations have narrow spans and more layers. See Addendum B for the definition of terms used in this report.

As seen in Figure 4, organizations are described as "tall" when few employees report to each manager, and there are many management layers, and "flat" when many employees report to each manager and there are only a few management layers.

### Figure 4



Taller organizations disperse decision authority among successive layers of management, increasing the time it takes to make service decisions. Flat organizations focus decision-making authority and move it down the hierarchy into units which provide services directly to customers. This allows faster, more customer-oriented decision-making. Other advantages of flat organizations mentioned by management literature include:

- Lower management costs
- Greater employee satisfaction and motivation
- More opportunities for development of employee skills
- Greater management focus on planning and goals
- Less duplication of tasks, roles and responsibilities
- Less micro-management and faster decision making
- Clearer communication between bottom and top layers
- Less paperwork due to fewer reporting requirements
- Decreased need for management-support staff
- Fewer planning and coordination meetings

#### RESULTS OF OUR STUDY

No single ratio of staff to managers is appropriate for every organizational unit. However, experts believe that organizations with larger numbers of staff per manager are more efficient. Seattle's staff to manager ratio of 5.9 is lower than the ratios of other public and private organizations we found. Many organizations have recently restructured to increase their spans. Seattle can support and encourage higher spans by strengthening some of its personnel policies.

## No Ideal Ratio of Staff to Managers and Number of Management Layers

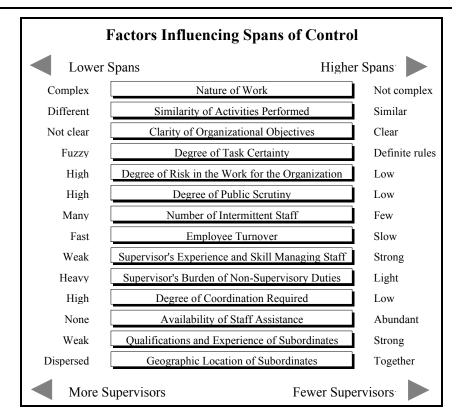
No ideal structure exists which fits all organizations or all functions within an organization. Numerous factors come into play in determining the best ratio of staff to managers, including the nature of the work tasks to be performed and special circumstances. While noting the variations between functions, contemporary management experts advocate high ratios of staff to managers.

The Ratio of Staff to Managers Depends on Work Tasks and Circumstances Spans that are too wide and spans that are too narrow both have drawbacks. Too few staff per manager diminishes an organization's effectiveness because it does not fully utilize the talents of its higher paid managers, who could manage more staff. It also does not fully utilize the service level staff who could assume more responsibility. However, too many staff per manager also diminishes an organization's effectiveness because managers are overburdened, and subordinates are left without sufficient coaching, training, or direction.

Leading management theorists agree that the most appropriate ratio of staff to managers can only be determined by carefully evaluating and balancing the particular purposes and characteristics of an organizational unit. Figure 5 summarizes some common task and situation characteristics which help determine the number of subordinates reporting to a manager.

## Figure 5<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> This figure is adapted from the City of Portland Audit Services Division's Span of Control Study, 1994, p. II-3. For more information on the impact of working supervisors (labeled "Supervisor's Burden of Non-Supervisory Duties" in the figure), please see page 22, "Reviewing Positions of Working Supervisors."



Special circumstances may require a ratio of staff to managers independent of inherent task characteristics. Examples of these influences on the ratio of staff to managers include:

- <u>Multiple Work Shifts</u> Some City functions must be staffed more than eight hours per day but do not require a large staff. This creates a low staff-to-manager ratio.
- <u>Expert Supervisors</u> Highly specialized tasks require expert supervision. For example, Seattle's Treasury Investment Officer supervises one employee. This function needs to be coordinated by an expert in the investment area, but workload requires only a total of two staff.
- <u>Legal Considerations</u> Grant-funded programs may require specific organizational structures, and labor union contracts may require the presence of supervisors for a specific number of staff.

Contemporary Thinking Advocates Broadening Spans and Reducing Layers While they agree that the appropriate number of staff per manager varies greatly among different organizations and even among different units and functions within the same organization, most contemporary management experts advocate spans of control higher than Seattle's span of 5.9. Advocates of broadening spans of control include:

<u>Peter Drucker</u>, who believes that too few staff to managers leads to the "deformation of management: levels upon levels" and that more staff per manager and fewer management layers lead to improved management and organizational performance.

<u>James O'Toole</u>, professor at the University of Southern California, whose study of spans of control showed an average of 10 staff per manager. He concluded that American workers are over-supervised.

Edward Lawler, author of <u>The Ultimate Advantage</u>, who states that organizations should never have less than 15 staff per manager, and should usually have more.

<u>Tom Peters</u>, who recommends that high-performance organizations operate with a minimum of 25 workers for each manager and a maximum of five layers.

<u>President Bill Clinton</u>, who directed the federal government to double spans of control to 14 staff per manager.

The National Commission on State and Local Public Service, which recommended decreasing the ratio of managers to staff and flattening the bureaucracy to increase accountability, save money, and shift personnel to the front line.

## Staff to Manager Ratios and Layers of Management in the City of Seattle

Seattle managers supervise an average of 5.9 staff when not counting leads (who have less than full supervisory responsibilities) as managers. This average drops to 4.4 counting leads as managers. 32% of Seattle's managers supervise three or fewer permanent employees. Almost 82% (7,975 employees) of the City's workforce is managed by five or more layers of management.

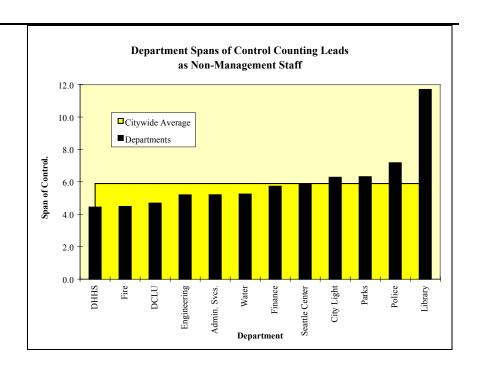
### The City Has 5.9 Staff Per Manager

As Figure 6 shows, the City's average ratio of staff to managers is 5.9<sup>3</sup> when not counting leads as managers. Departmental averages range from a low of 4.4 (DHHS) to a high of 11.7 (Library). We calculated the average number of permanent employees supervised per manager for each department we studied (excluding intermittent and temporary employees).<sup>4</sup> These averages provide a rough estimate of the supervisory workload of managers in each department.

#### Figure 6

<sup>&</sup>lt;sup>3</sup> We report the average span of control across participating departments as the "Citywide Average" span. We reviewed the organization of departments containing 90% of the budgeted full-time equivalent (FTE) employees of the City.

<sup>&</sup>lt;sup>4</sup> Some departments have restructured since we collected our information. DCLU reorganized so substantially that we have based our calculations for them on their 1996 organizational chart.



We found that a significant number of managers supervise only a few staff. Figure 7 shows the number of managers with spans less than three.

Figure 7

	S	pan Rang	(e	
Department	>0-1	>1-2	>2-3	Total
Administrative Services	8	14	17	39
City Light	14	41	36	91
Construction and Land Use	8	1	9	18
Engineering	18	33	32	83
Finance	5	5	3	13
Fire	10	10	68	88
Housing and Human Services	10	12	7	29
Library	3	5	3	11
Parks and Recreation	15	15	21	51
Police	8	16	26	50
Seattle Center	6	4	5	15
Water	8	19	18	45
City Total	113	175	245	533

Of Seattle's 1,651 managers, 32% (533) supervise three or fewer permanent employees. See Addendum C for more data on the number of staff that managers supervise.

<sup>&</sup>lt;sup>5</sup> For more information on the part-time and temporary-intermittent staffing issues related to the Library, Parks, Seattle Center, and DHHS, please see Addendum A: Data Collection, Editing and Methodology for Calculations.

Each of these departments have particular functions and staffing methods which affect its ratio of staff to managers. The following is a brief description of these issues.

<u>Administrative Services</u> - This department manages a diverse portfolio of functions, many of which are geographically dispersed, relatively small, or have several shifts.

<u>City Light</u> - In 1989, the utility initiated a Productivity Improvement Program, which included a focus on reducing layers of management. Implementation of the Program occurred over a five year period. Currently, City Light's average span of 6.3 is higher than the Citywide average.

<u>Construction and Land Use</u> - This department has reorganized since the summer of 1995. Its span of 4.7 reflects its new organizational structure.

<u>Engineering</u> - The Engineering Department includes five separate divisions, two of which are utilities. These divisions are: the Drainage and Wastewater Utility, the Solid Waste Utility, Transportation, Engineering Services, and Executive Management.

<u>Finance</u> - This department includes several specialty functions with small staffs, such as Risk Management and Treasury Investments.

<u>Fire</u> - The services of the Fire Department are provided from fire trucks and other emergency response vehicles. These vehicles are generally staffed with three to four person crews, which must include a supervising officer.

<u>Housing and Human Services</u><sup>5</sup> - This department manages several programs, including the Seattle Conservation Corps, and the Summer Youth Employment Program, which employ temporary and intermittent staff. The number of employees varies greatly depending on the time of year. Including these staff raises the Department's average span of control from 4.4 to 12.7.

<u>Library</u><sup>5</sup> - The Library employs many part-time staff. As a result, it employs far more personnel (620) than full-time equivalent employees (406 FTE). Basing the Library span of control on FTE rather than personnel would lower it from 11.7 to 7.7.

<u>Parks and Recreation</u><sup>5</sup> - Parks manages hundreds of temporary and intermittent employees, and thousands of volunteers. Adding

temporary and intermittent employees into our span calculation raises Parks' average span from 6.3 to 10.3.

<u>Police</u> - The Police Department's recent reducing of management layers has helped it achieve a span of control which is above average for the City.

<u>Seattle Center</u><sup>5</sup> - Seattle Center employs many temporary and intermittent staff for events. Including these employees increases Seattle Center's span from 5.9 to 12.9.

<u>Water</u> - Since each supervisor directs several crews, it is the practice of the Water Department to assign a lead to direct each crew act in the absence of the supervisor. The department is gathering information from other water utilities and consultants to obtain staffing comparisons and to identify program and staffing efficiencies.

We based our study on a "snapshot" of City government which we collected in the summer of 1995. It included 9,734 permanent full- and part-time staff. Actual workloads of specific managers vary for the task-related reasons mentioned in the previous section, such as non-supervisory workload. The Department of Housing and Human Services, Parks, the Library, and Seattle Center also have unusual staffing patterns which influence the workload of their managers.

Lead Staff Lower Seattle's Span of Control to 4.4 Employees per Manager Counting lead staff as management changes the City's span of control profile.<sup>6</sup> Leads are employees who regularly assign, instruct and check the work of others as a significant part their responsibilities. The element that distinguishes lead staff from supervisors is that leads do not formally evaluate the performance of the staff they help supervise.<sup>7</sup> Of the 9,734 permanent part- and full-time City employees we studied, 1,652 (17 percent) were management staff with supervisory responsibilities,<sup>8</sup> and 562 (6 percent) were lead staff. Counting lead staff as additional managers in span of control calculations causes the City's average span of control to drop to 4.4. The range of individual department spans falls to a low of 3.1 (Water) and a high of 6.5 (Library). Figure 8 shows average spans of control by City department, including leads as management staff:

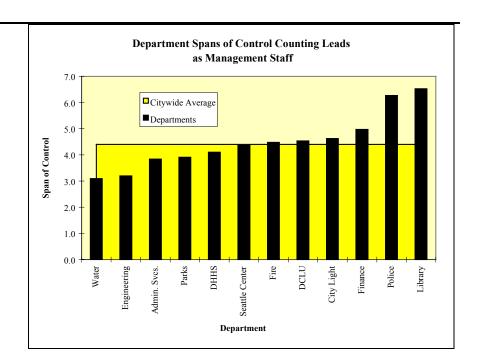
## Figure 8<sup>9</sup>

<sup>6</sup> King County counted leads as management in its study. The City of Portland (Oregon) study did not include leads because Portland has very few lead workers.

<sup>&</sup>lt;sup>7</sup> Another difference between leads and supervisors is that leads generally receive less pay than supervisors. Leads receive roughly four to six percent more than their highest paid subordinates, while supervisors receive eight to twelve percent more than their highest paid subordinates.

<sup>&</sup>lt;sup>8</sup> Employees with management job titles such as "manager" or "supervisor" who did not have directly reporting subordinates were considered non-management staff.

<sup>&</sup>lt;sup>9</sup> Since crew supervisors in the Water Department supervise more than one crew, each crew also has a lead, who directs the crew in the absence of the supervisor.

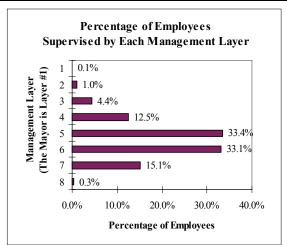


As described in the previous section, the span of control profile for Parks, DHHS, and Seattle Center would be higher and the profile of the Library lower if we had used a different methodology. Because leads assist supervisors with some management tasks, it is important to consider leads in assessing supervisory workloads. However, since the supervisory responsibilities leads handle vary greatly among the leads in various units, including leads as management staff in span calculations provides only a rough estimate of the amount by which they reduce supervisory workloads.

Most Employees Are Managed Through 5-6 Layers of Management In the City of Seattle, we found a maximum of eight layers of management, including the Mayor, above line employees. Figures 9 and 10 show the percentage and number of City staff directly managed by each layer of management. <sup>10</sup>

Figure 9 Figure 10

 $<sup>^{\</sup>rm 10}$  Leads are not considered management staff in this figure.





As these charts show, 33.4 percent (3,253 employees) of the City's workforce is managed by five layers. Likewise, another 33.1 percent (3,218 employees) is managed by six layers. An additional 15.4 percent (1,504 employees) is managed by seven or eight layers. Hence, 81.9 percent (7,975 employees) of the City's workforce is managed by five or more layers.

Figure 10 shows the number of management layers in each department we studied.<sup>11</sup> The Mayor is the first layer.

Table 1: Management Layers and FTEs by Department (the Mayor is Layer 1)\*

5 Layers	6 Layers	7 Layers
DCLU (312 FTE)	Admin. Services (507 FTE)	City Light (1,973 FTE)
Finance (186 FTE)	Library <sup>t</sup> (380 FTE)	Engineering (1,110 FTE)
	Parks (1,091 FTE)	Fire (1,080 FTE)
	Police (1,823 FTE)	DHHS (532 FTE)
		Seattle Center (334 FTE)
		Water (615 FTE)

\*Budgeted FTEs from 1995 Adopted Budget.

<sup>&</sup>lt;sup>11</sup> Some departments had a very small number of staff managed in their deepest layer. In Table 1, we report the number of layers of management required to manage 98% of their staff because this provides the most accurate picture of their primary structure. For an exact count of the employees managed in each layer of each department, please see Addendum D: Permanent Employees Supervised by Management Layers.

<sup>&</sup>lt;sup>t</sup> The City Librarian is appointed and directed by the Library Board, and does not report to the Mayor. For consistency with other departments, the Library Board was also considered Layer 1.

Seattle Has Fewer Staff per Manager Than Other Organizations That Have Completed Span of Control Studies In comparison to Seattle's average span of control of 5.9 (management staff only) and 4.4 (leads as management), other organizations report higher spans:

- A study of spans of control and layers of hierarchy in the government of King County, Washington, 12 which included 6,768 employees in 14 executive branch departments found a span of control of 8.9 (no leads), or 5.5 (with leads).
- A study of spans of control and layers of management in the municipal government of Portland, Oregon, <sup>13</sup> which included 4,953 full-time equivalent positions, reported an average span of control of 6.0. Portland only has a few leads, and the study did not count them as managers. Portland's management workload, represented by its span of control average of 6.0, is significantly greater than Seattle's span of control average of 5.9 when recognizing that Portland has very few lead workers and 6 percent of Seattle's employees are lead workers.
- A study of spans of control and layers of management in private companies<sup>14</sup> found a median span of control of 8.8. Spans found in this study range between 2.3 and 83.4 with clusters around 5-6, 10-12, and the mid-20's.

Because each of these studies applied different methodologies, we adjusted their findings to make them consistent with the methodology we used for our report.

Figure 11 summarizes these comparative findings:

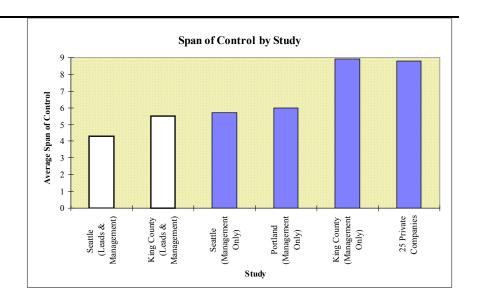
## Figure 11<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> King County Audit Office, 1994. This study based span calculations on personnel.

<sup>&</sup>lt;sup>13</sup> Audit Office of the City of Portland, 1994. This study based span calculations on FTEs.

<sup>&</sup>lt;sup>14</sup> The Conference Board (a global business membership organization), 1993. This study based span calculations on personnel.

<sup>&</sup>lt;sup>15</sup> The King County Auditor considered leads as a layer of management because of their supervisory roles. According to this methodology, the "Leads as Managers" column in Figure 11 most accurately reflects the King County average span of control.



While the study of private companies reports more staff per manager than we found in the public entities, these numbers may be understated or overstated. We could not determine how the private study handled the issue of leads (if any), nor do we know how comparable the private organizations are to the City's departments.

Our sample did not provide enough information on layers of management to produce fruitful comparisons with Seattle.

## Seattle Can Learn from the Restructuring of Other Organizations

Many public and private organizations are reorganizing based on specific span of control targets. Seattle can learn from the experience of these other organizations, and use their goals and processes as a base from which to develop our own.

Many Organizations Have Increased the Ratio of Staff to Managers by Restructuring Many organizations are using information about their ratio of staff to managers and their management layers to help them reorganize. The following private and public organizations have restructured or plan to restructure based on spans:

- Between 1979 and 1989, General Electric expanded its ratio of managers to staff from about 1-to-6 to about 1-to-12, reducing layers of management company-wide from an average of 9 to an average of 4 or 5.
- Between 1981 and 1989, Xerox doubled the average number of staff per manager to about seven.
- Between 1983 and 1989, average number of staff per manager at Phillips Petroleum increased from 6.8 to 8.1.
- The National Performance Review recommended the reduction of 12 percent of the federal civilian employees (252,000 jobs) to broaden spans of control and eliminate layers of management.
- The Correctional Service of Canada moved to a flatter organization, with managers who formerly controlled seven or eight subordinates now leading up to 24.
- Charlotte, North Carolina, set the following schedule for layers of management in departments based on department size:

Department Size	Layers of Management
Less than 50 employees	2 or fewer
50 - 125 employees	3 or fewer
More than 125 employees	5 or fewer

Some departments requested exemptions; none were granted. By March, 1993, 12 of 24 departments had met these goals.

Other Public Organizations in the Northwest Are Considering Setting Goals for Spans of Control and Number of Layers King County, Washington, and Portland, Oregon have both recently completed span of control studies which proposed establishing goals for the ratio of staff to managers.

#### King County

The County Council is considering legislation establishing goals for ratios of staff to managers as a means of moving departments away from control-oriented environments, improving responsiveness to customer needs, and increasing organizational efficiency. Included in these goals is the elimination of supervisory responsibilities for management positions with fewer than three direct subordinates. The legislation would require all County departments to achieve a phased-in increase in their average spans of control (to eight at year-end 1996, ten at year-end 1997, and twelve at year-end 1998).

#### Portland

The Auditor of Portland (Oregon), in her report, <u>Span of Control Study</u>, recommended that, in all bureaus other than Fire and Police, the City require special justification for:

- middle managers with spans less than five,
- operations and maintenance supervisors with spans outside the range of 10 to 20, and
- administrative supervisors with spans outside the range of 6 to 12.

For the Fire Bureau, the report recommended an average span of 4.5 - 5.0, and for the Police Bureau, an average span of 8.0 - 9.0. 17

It is important to note that management experts encourage using goals as targets, as incentives for learning more about different structures, and as measures of improvement. Using goals as rigid standards will create management problems by forcing some functions into inappropriate management molds.

<sup>&</sup>lt;sup>16</sup> The legislation would also decrease the maximum number of departmental management layers to six at year-end 1996, five at year-end 1997 and 4 at year-end 1998.

<sup>&</sup>lt;sup>17</sup> The report also recommended three or fewer management layers for agencies with less than 50 employees, four or fewer for agencies with 50-150 employees, five or fewer for agencies with more than 150 employees, and no more than six layers for the Public Safety Bureau.

## Seattle Policy Changes Can Encourage Broader Spans of Control

Formal and informal organizational policies encourage narrower or broader spans by their effects on employee quality and the incentives and disincentives they create. The City has already identified many positive policy goals in its <u>Seattle Works</u> framework. It can make progress toward these goals and toward wider spans of control by ensuring its policies support:

- investing in people;
- separating classification and compensation;
- communicating clearly with employees;
- reviewing positions of working supervisors;
- adding flexibility to layoff order; and
- providing appropriate fiscal incentives.

### <u>Seattle Works</u> Provides Goals for a New Management Culture

During the last few years, the City has started a number of initiatives designed to make the City more effective, efficient and economical. Among these initiatives are longer term budgets, use of performance measures, and managed competition. A recent City initiative has embraced a number of goals designed to change the City's culture into an innovative organization committed to continuous quality improvement. The Mayor's Special Task Force on the City Performance Framework endorsed the following goals in its publication, <u>Seattle Works</u>:

- providing profiles for good supervision and management;
- equipping managers with the skills and knowledge to perform their roles:
- recognizing that creativity and flexibility are important skills for managers, team leaders and employees;
- providing for flexibility in the personnel system;
- identifying and eliminating systems that do not add value;
- building partnerships between managers and employees;
- investing in technology;
- ensuring communications are clear, effective, appropriate and organization wide; and

 encouraging supervisors to adopt more of a coaching and mentoring role.

With fundamental shifts in supervision to facilitation, coaching, and leadership development, management can make use of self-directed work teams, performance benchmarks, and technology based innovations in work processes. Hence, the City can flatten its organization when the skill level of staff and managers allows for the delegation of basic oversight and quality measures to line employees.

#### Investing in People

Moving to broader spans requires managers who can delegate well, and staff who can exercise discretion and work with greater autonomy. Organizations can attract employees and develop their skills through compensation, training, and performance evaluation policies.

#### Compensation

Salary and benefits which are competitive with the rest of the employment market are important to maintaining a qualified staff. If compensation is too low compared to the market, it will be difficult to attract skilled staff. If compensation is too generous, it will discourage staff turnover and may lead to employee complacency.

The Personnel Department is reviewing management compensation, and comparing it to the employment market in a study to be completed in 1996. This study will provide valuable information on whether management compensation levels are in need of an overhaul.

#### Training

Placing emphasis on training permits larger spans of control because well-trained staff require less supervision, and welltrained managers delegate work assignments more effectively.

Investments in employee compensation and training are so important that some organizations have found that staff development costs consume most of the savings created by the flattened organizational structure.

#### Performance Evaluation

Weak performance evaluation and disciplinary systems act to discourage wider spans of control, because managers must devote more time to closely supervising problem employees or employees who do not perform their tasks well. Higher performing employees, on the other hand, permit wider spans of control. By implementing systems to promptly identify, train or replace staff who cannot perform their responsibilities adequately, organizations can encourage larger spans of control. City of Seattle managers had two principal criticisms of the existing performance evaluation and disciplinary process:

- Because formal disciplinary actions require an extensive and time-consuming process, managers may choose to condone low performance rather than invest time in the formal process.
- Managers perceive that there is a stigma attached to contested disciplinary actions. This makes them unwilling to initiate these actions except in extraordinary circumstances. Managers expressed concern about both the opinion of their colleagues and the support of their superiors.

The City is currently addressing the first weakness by implementing a "Corrective Action" process which emphasizes early intervention and discussion of performance expectations between managers and employees. Providing more support to managers involved in disciplinary actions, perhaps through a mentoring program, could help reduce the perceived stigma which managers associate with contested disciplinary actions.

# Separating Compensation From Supervision

Compensation systems which link higher pay or prestige to supervision encourage narrow spans and create many layers. These systems provide an incentive to promote valued employees into management solely to retain their technical skills or organizational experience. This incentive leads to creating more managerial positions than necessary, with an unnecessarily low average ratio of staff to managers. The City can reduce this incentive in two ways:

#### (1) Develop technical career tracks.

By creating higher-paid specialist positions, the City can retain expert or experienced staff who would otherwise leave or become supervisors. Under this system, good supervisors supervise, and technical experts do technical work. This system avoids the productivity cost associated with bad management but may not reduce payroll costs.

One special type of employee which the personnel system should accommodate is the "project manager" who manages information processes and projects rather than people. These employees are "technical" in the sense that they manage information rather than

personnel and their management skills may be as or more developed than managers of people.

### (2) Develop horizontal career opportunities.

For many employees, the new challenges, responsibilities, and skills associated with lateral transfers may be a good substitute for becoming a supervisor. Unfortunately, the existing classification and compensation system makes it difficult to transfer employees laterally because job titles and compensation are based on a narrow set of job responsibilities. Under the current system, lateral transfers require time-consuming reclassification and salary changes. Moving to a broad-banded classification system could make lateral transfers easier, substituting horizontal opportunities for vertical advancement.

The Personnel Department is working on changes to the classification and compensation system to address these issues. The City has a pilot project providing for a dual track compensation system that permits market-based salary adjustments for highly technical individuals. The City is also exploring using a new classification system which would reduce the number of classifications and increase the variety of duties within each classification. This system simplifies horizontal transfers

# Communicating Clearly with Employees

Clear communication with employees is critical to both restructuring and efficient operations. Reorganizing the work of an organization creates employee anxiety, and can result in low morale. Clear, timely explanations of the goals and process of the reorganization can help to avoid this problem. Good communication must continue after reorganization. Since employees in a flattened organization are expected to exercise more authority, it is critical that they have a clear understanding of the organization's mission and objectives, as well as their supervisors' expectations. Otherwise, employees may react to their added responsibility by carefully complying with the letter of all rules, instead of exercising their new independence.

The City has identified the importance of clear communications in the Strategic Budget Initiative for the 1997-98 Biennial Budget. The Initiative states that "the City shall discuss a job security policy to uphold employee morale, maintain talented employees and promote flexibility in assignments. It shall also

develop an employee communications plan to engage the City workforce in the difficult budget discussions ahead." Actions based on this statement will foster positive communications.

# Reviewing Positions of Working Supervisors

Carefully reviewing the workload of working supervisors may lead to consolidating supervisory responsibilities, and thus, to wider spans of control. Many managers in the City perform a mixture of supervisory and non-supervisory tasks. The use of working supervisors decreases an organization's calculated span of control since supervisory duties are divided among many managers.

While the tasks involved in some functional areas may justify having a working supervisor, too many working supervisors with small staffs may result in higher payroll costs and coordination difficulties. Working supervisors may have a difficult time focusing on coaching, facilitating, and supervising while also providing direct service. Reducing the number of managers by consolidating the supervisory responsibilities of several existing managers will reduce the number of managers and time spent in managerial meetings. It may also improve communications by reducing the number of supervisors required to coordinate tasks.

However, not all functions will benefit from this type of consolidation. A working supervisor may be appropriate where a function requires few staff but a manager with a high level of technical expertise. The investment management function in Finance's Treasury Division exemplifies this type of small function.

Consolidating supervisory responsibilities may reduce payroll costs. Since supervisors generally receive more pay than the staff they manage, eliminating supervisory positions may reduce the number of high paid staff. However, if the non-supervisory tasks they perform require great technical expertise, the salaries of the staff who will have to perform them may be comparable to current management salaries (see "Separating Compensation From Supervision" above).

Reviewing the workload of supervisory positions, both before and after consolidation, also helps avoid over-working supervisors and the staff under them. As it is, some managers feel that their non-supervisory duties crowd out their supervisory ones. Organizations which have flattened their structure have emphasized the importance of eliminating extraneous or

redundant work before restructuring. The City has already identified this as an important step in the Strategic Budget Initiative, which states that the City must "review internal processes with the goal of eliminating unnecessary or redundant activities and streamlining required processes."

# Adding More Flexibility to Layoff Order

Keeping critical talent is crucial to successful restructuring. When downsizing, Seattle's layoff order prevents managers from selecting employees with poor performance or unneeded skills for layoff. Instead, managers must apply seniority measures for personnel cuts or allow attrition to achieve the desired reductions. While downsizing in this manner, many organizations have found that they removed personnel with critical skills and then had to replace or rehire them.

Experts and corporate managers agree that the ability to select employees for dismissal improves restructuring efforts and that seniority based layoff orders make restructuring more difficult. Managers in the City identified layoff order as a problem.

The City is reviewing its layoff policies and is considering alternatives to the current system. Any such changes would, however, be subject to collective bargaining.

# Providing Appropriate Fiscal Incentives

Sending appropriate budgeting signals can help Seattle achieve broader spans of control. Currently, managers may not take advantage of opportunities to restructure for long-term cost savings, because payroll cost savings accrue gradually, while employee dissatisfaction is immediate. Under the current system, the salaries of supervisory employees whose jobs are reclassified to a lower non-supervisory pay scale are frozen until their new pay scale catches up to their current pay rate. The Office of Management and Planning allows departments to keep the salary savings which are generated. However, because these savings accrue over several years, the savings may not be enough to balance the employee discontent generated by the reclassification. For this reason, reclassification of a position is frequently postponed until the incumbent leaves.

The Office of Management and Planning recently acted to make the incentives surrounding upward reclassifications more rational by requiring departments to find savings to fund them. It should now consider ways to improve budget incentives for downward reclasses.

## Additional Issue: Non-Supervisory Personnel Have Management Job Titles

Several departments employ personnel who have no direct subordinates but are classified as upper-level managers with supervisory job titles. Executive managers stated that these positions exist primarily to retain employees who either have critical expertise, or who are floating managers who work on short- or medium-term projects and have no permanently assigned staff.

Audit staff did not identify any situation in which a department deliberately deceived Personnel in classifying a position. These "orphan" management positions appear to have developed over time through informal transfers of staff between organizational units

Current institutional practices perpetuate these "exceptions" to the personnel system.

- Managers do not notify the Personnel Department of changes in duties which would result in a downward reclassification.
- The Personnel Department does not currently conduct classification reviews to ensure compliance with classification rules. Classification staff have focused on the current compensation and classification project for the last 5 years, and have not been available to conduct reviews. Personnel states that ideally 20% of City employees would receive reviews annually.
- If the Personnel Department learns of an "exception," it may delay reclassification in response to pressure from the affected department.

The personnel system should be improved to eliminate these exceptions by creating flexible classifications which accommodate departmental needs for these positions and by conducting classification reviews.

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<sup>&</sup>lt;sup>18</sup> Such staff were not considered management staff in this study.

# Conclusion and Recommendations

Seattle has smaller spans of control than current management experts recommend and smaller spans than we found in other organizations. While not necessarily an indication that Seattle is over-managed, this finding does suggest that the City could benefit from a thorough, systematic review of its management positions and of the policies which influence the number of staff managers can supervise effectively. Specifically, to make more efficient use of City personnel, we recommend the following:

- 1. The City should require each department to review management positions and identify which functions may benefit from increasing the ratio of staff to managers. To evaluate whether broadening spans will improve efficiency in the City, all City functions should be reviewed to identify:
  - management responsibilities with potential for consolidation;
  - staff and management positions which may no longer be necessary or which could be transferred to another function; and,
  - exceptionally well managed organizational units as models for the rest of the City.

Generally, departments can best evaluate the need for specific management positions in their functional areas. They may benefit from consulting with organizations with similar missions to identify specific ways to enhance their efficiency. Addendum C shows the number of permanent staff supervised by managers in the various departments we studied. In addition, we have provided charts to each department showing which positions have a low ratio of staff to managers. Finally, the Personnel Department is developing a Span of Control Assessment Tool as an aid for departments in preparing their 1997-8 biennial budgets. This is an excellent first step in a Citywide management review.

- 1. The Personnel Department should consider the proportion of a working supervisor's workload which is supervisory in nature when comparing City salaries to the employment market and setting salary guidelines.
- 2. The Personnel Department should continue work on progressive personnel policies, including:
  - more effective performance evaluation and discipline

processes;

- a fully competitive compensation system;
- a more flexible layoff order; and
- an improved classification and compensation system.

This work is critical to improving the culture of management in the City, as is a continued emphasis on training.

1. The Office of Management and Planning should continue to adjust the budget process to reward departments for cost-saving personnel actions and require them to face the costs of personnel actions which result in higher compensation.

## **ADDENDA**

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Addendum A Addendum A

### Data Collection, Editing, and Methodology For Calculations

To prepare this study, we first used existing organizational charts to develop spreadsheets detailing organizational structures. City departments then reviewed and revised our spreadsheets, noting lead workers on them. We systematically edited the organizational charts in the following ways to standardize calculations:

- We eliminated temporary and intermittent positions.
- We considered employees with management job titles but no directly reporting subordinates as non-management staff.
- Where it was not clear which employees were directed by workers marked as leads, we did not count these lead workers as leads.

Following this editing process, counts of lead, supervisory, and line staff were made. We used these counts to calculate spans of control. We did not use counts of full time equivalent (FTE) employees in these calculations for several reasons:

- The difference between FTEs and actual personnel was 2 percent or less for most departments. Discussion of several departments in which the difference between number of personnel and number of FTEs exceeds 2 percent appears below.
- Few supervisors were part-time staff. This means that the variance between personnel and FTEs would effect the numerator of the span of control calculation more than the denominator, and the difference between a personnel-based span of control and an FTE-based span would be small.
- Audit staff decided that the number of people supervised was more relevant in determining the work load of a supervisor than the total FTE supervised.

Impact of Editing and Calculation Methodology On Span of Control Results Because we chose to calculate spans of control using the number of part-time and full-time permanent employees, our spans of control may overstate or understate the management workload of some departments with exceptional staffing patterns.

### The Library

Counting the Library's large number of part-time staff just as if they were full-time staff produces a (larger) span of control which overstates the managerial workload. Part-time staff individually do not require as much of a manager's time for day-to-day assigning of tasks and monitoring of work products as full-time staff do. On the other hand, if we had used full-time equivalents for part-time staff (for example 3 FTEs in place of 12 quartertime staff), we would have produced a (lower) span of control which understated the managerial workload. It generally takes more managerial time to schedule, train, evaluate, and counsel 12 part-time staff than 3 full-time staff. We know of no way to compare accurately the supervisory burdens of managing many part-time employees with the burdens of managing an "equivalent" number of full-time employees. Neither the number of staff nor their full-time equivalents allows a valid comparison of the Library's workload to that of other departments. Figure 7 presents the Library's spans of control, using first the number of personnel, then their full-time equivalents.

Figure 7

	Management Staff Only	Leads as Management Staff
Personnel Span	11.7	6.5
FTE Span	7.7	4.4
Difference		32%

### Parks, Housing and Human Services, and Seattle Center

By not including temporary and intermittent employees in our calculations of span of control, our results understate the managerial workload in Parks, Department of Housing and Human Services and Seattle Center. These departments have large and constantly changing numbers of temporary and intermittent staff for event, seasonal and program staffing, with many intermittent staff making up a single full-time equivalent over the course of a year. Additional managerial workload is

Addendum A Addendum A

### Data Collection, Editing, and Methodology For Calculations

associated with these temporary and intermittent staff. On the other hand, counting the temporary and intermittent employees would have greatly overstated the managerial workload because on the average, each employee works for a few hours a week. For example, Seattle Center currently employs roughly 384 temporary and intermittent employees in 75 FTE. On the average, each of these employees works 0.2 FTE. Including these temporary and intermittent employees in span calculations would increase Seattle Center's span of control from 5.9 to 12.8 (counting management staff only).

Finally, if we had used the full-time equivalents of temporary and intermittent staff, our results would have been somewhere in between, with the Department of Housing and Human Services having a span of 6.0; Parks, a span of 6.7; and Seattle Center, a span of 6.9.

### Methodological Exceptions

An exception was made in the calculation methodology for the Engineering Department, because lead responsibilities in Engineering street crews depend on work site. For example, Asphalt Rakers are leads until the crew reaches a job site. On the job site, Truck Drivers are leads. So as not to overemphasize the role of leads, we did not count both Truck Drivers and other staff such as Asphalt Rakers as leads on Engineering Department crews. This reduced the number of Engineering Department leads by 61 (32 percent). This change has no effect on the span of control calculated with leads as non-management staff, but raises the span from 2.7 to 3.2 when counting leads as management staff.

Span of Control

The number of subordinate staff reporting directly to one manager. These subordinates may be either managers or line staff. An organization's average span of control is the average of the span of control of each of the management staff in the organization. This technique recognizes that supervisors are staff in one layer and are supervisors in the next.

Managers and Management

All supervisory employees, including department heads, managers and supervisors at all levels, including line supervisors.

Layers of Management

The maximum number of people including the chief executive through which a line staff employee must report in order to reach the chief executive of an organization. In our calculations of layers of management in Seattle, we considered the Mayor as Layer 1, and did not count line staff as a layer. For example, an organization with the following layers of management would have 4 levels of management:

- 1. Mayor
- 2. Director
- 3. Manager
- 4. Supervisor
- Line Staff

We paid close attention to this definition in developing comparisons with other organizations, since this term can have several meanings.

Supervisor

A person who allocates work assignments, instructs subordinates in the work they will perform (either directly or by enforcement of well-established rules), evaluates work based on results, and works with subordinates to improve performance. This person may also serve as a technical expert and in a trouble-shooting role. The key criterion for being a supervisor is having the responsibility of performing formal performance evaluations.

Lead Worker

A person who, in addition to regular duties, performs some supervisory functions (such as assigning work, instructing, and checking work) but who is not responsible for formally evaluating the performance of subordinates. Depending on the circumstances, leads are or are not counted as managers.

Supervisory Unit

A single organizational unit consisting of one supervisor and the subordinate staff which report directly to her or him.

Addendum C Addendum C

# Staff and Managers with Specific Spans of Control

The following figures show the number of permanent employees managing, or being managed under specific spans of control. The "Span Range" columns should be read as a range. For example, the column titled ">0-1" means "Spans greater than zero, and less than or equal to one." The first set of tables shows spans by ranges of one. The second set of tables shows the same information by ranges of three.

Figure C-1: Number of Managers by Their Span of Control

					Span l	Range					
Department	>0-1	>1-2	>2-3	>3-4	>4-5	>5-6	>6-7	>7-8	>8-9	9+	Total
Administrative Services	8	14	17	9	8	7	6	4	8	9	90
City Light	14	41	36	60	18	23	27	14	22	50	305
Construction and Land Use	8	1	9	9	12	8	7	4	1	1	60
Engineering	18	33	32	31	17	21	13	5	7	28	205
Finance	5	5	3	4	2	6	0	0	2	6	33
Fire	10	10	68	8	9	136	1	0	1	6	249
Housing and Human Services	10	12	7	8	12	8	8	3	2	3	73
Library	3	5	3	2	2	3	3	2	3	27	53
Parks and Recreation	15	15	21	23	27	12	8	8	5	25	159
Police	8	16	26	24	35	24	23	16	15	63	250
Seattle Center	6	4	5	12	5	7	3	6	1	6	55
Water	8	19	18	22	8	9	9	8	3	15	119
City Total	113	175	245	212	155	264	108	70	70	239	1,651

Figure C-2: Percentage of Managers by Their Span of Control

Department	>0-1	>1-2	>2-3	>3-4	>4-5	>5-6	>6-7	>7-8	>8-9	9+	Total
Administrative Services	9%	16%	19%	10%	9%	8%	7%	4%	9%	10%	100%
City Light	5%	13%	12%	20%	6%	8%	9%	5%	7%	16%	100%
Construction and Land Use	13%	2%	15%	15%	20%	13%	12%	7%	2%	2%	100%
Engineering	9%	16%	16%	15%	8%	10%	6%	2%	3%	13%	100%
Finance	15%	15%	9%	12%	6%	18%	0%	0%	6%	18%	100%
Fire	4%	4%	27%	3%	4%	55%	0%	0%	0%	2%	100%
Housing and Human Services	14%	16%	10%	11%	16%	11%	11%	4%	3%	4%	100%
Library	6%	9%	6%	4%	4%	6%	6%	4%	6%	51%	100%
Parks and Recreation	9%	9%	13%	14%	17%	8%	5%	5%	3%	16%	100%
Police	3%	6%	10%	10%	14%	10%	9%	6%	6%	25%	100%
Seattle Center	11%	7%	9%	22%	9%	13%	5%	11%	2%	11%	100%
Water	7%	16%	15%	18%	7%	8%	8%	7%	3%	13%	100%
City Total	7%	11%	15%	13%	9%	16%	7%	4%	4%	14%	100%

Figure C-3: Number of Employees by the Span of Their Work Unit

					Span I	Range					
Department	>0-1	>1-2	>2-3	>3-4	>4-5	>5-6	>6-7	>7-8	>8-9	9+	Total
Administrative Services	8	27	51	36	40	42	42	32	72	118	468
City Light	14	80	106	217	90	138	188	112	195	775	1915
Construction and Land Use	8	2	27	36	60	48	49	32	9	10	281
Engineering	18	66	96	124	85	126	91	40	63	357	1065
Finance	5	10	9	16	10	36	0	0	18	85	189
Fire	9	19	192	32	45	694	7	0	9	108	1115
Housing and Human Services	10	24	21	32	60	48	56	24	18	31	324
Library	3	10	9	8	10	18	21	16	27	498	620
Parks and Recreation	15	29	62	92	135	72	56	64	45	434	1004
Police	8	31	78	94	174	143	158	125	135	847	1793
Seattle Center	6	8	15	45	25	41	21	47	9	106	323
Water	8	36	54	88	40	54	63	62	26	193	624
City Total	112	342	720	820	774	1460	752	554	626	3562	9721

Figure C-4: Percentage of Employees by the Span of Their Work Unit

					Span I	Range					
Department	>0-1	>1-2	>2-3	>3-4	>4-5	>5-6	>6-7	>7-8	>8-9	9+	Total
Administrative Services	2%	6%	11%	8%	9%	9%	9%	7%	15%	25%	100%
City Light	1%	4%	6%	11%	5%	7%	10%	6%	10%	40%	100%
Construction and Land Use	3%	1%	10%	13%	21%	17%	17%	11%	3%	4%	100%
Engineering	2%	6%	9%	12%	8%	12%	9%	4%	6%	34%	100%
Finance	3%	5%	5%	8%	5%	19%	0%	0%	10%	45%	100%
Fire	1%	2%	17%	3%	4%	62%	1%	0%	1%	10%	100%
Housing and Human Services	3%	7%	6%	10%	19%	15%	17%	7%	6%	10%	100%
Library	0%	2%	1%	1%	2%	3%	3%	3%	4%	80%	100%
Parks and Recreation	1%	3%	6%	9%	13%	7%	6%	6%	4%	43%	100%
Police	0%	2%	4%	5%	10%	8%	9%	7%	8%	47%	100%
Seattle Center	2%	2%	5%	14%	8%	13%	7%	15%	3%	33%	100%
Water	1%	6%	9%	14%	6%	9%	10%	10%	4%	31%	100%
City Total	1%	4%	7%	8%	8%	15%	8%	6%	6%	37%	100%

Addendum C Addendum C

# Staff and Managers with Specific Spans of Control

Figure C-5: Number of Managers by Their Span of Control

		Span 1	Range		
Department	>0-3	>3-6	>6-9	9+	Total
Administrative Services	39	24	18	9	90
City Light	91	101	63	50	305
Construction and Land Use	18	29	12	1	60
Engineering	83	69	25	28	205
Finance	13	12	2	6	33
Fire	88	153	2	6	249
Housing and Human Services	29	28	13	3	73
Library	11	7	8	27	53
Parks and Recreation	51	62	21	25	159
Police	50	83	54	63	250
Seattle Center	15	24	10	6	55
Water	45	39	20	15	119
City Total	533	631	248	239	1651

Figure C-6: Percentage of Managers by Their Span of Control

		Span 1	Range		
Department	>0-3	>3-6	>6-9	9+	Total
Administrative Services	43%	27%	20%	10%	100%
City Light	30%	33%	21%	16%	100%
Construction and Land Use	30%	48%	20%	2%	100%
Engineering	41%	34%	12%	13%	100%
Finance	39%	36%	6%	18%	100%
Fire	35%	61%	1%	2%	100%
Housing and Human Services	40%	38%	18%	4%	100%
Library	21%	13%	15%	51%	100%
Parks and Recreation	32%	39%	13%	16%	100%
Police	20%	33%	22%	25%	100%
Seattle Center	27%	44%	18%	11%	100%
Water	38%	33%	17%	13%	100%
City Total	32%	38%	15%	14%	100%

Figure C-7: Number of Employees by the Span of Their Work Unit

		Span 1	Range		
Department	>0-3	>3-6	>6-9	9+	Total
Administrative Services	86	118	146	118	468
City Light	200	445	495	775	1915
Construction and Land Use	37	144	90	10	281
Engineering	180	335	194	357	1065
Finance	24	62	18	85	189
Fire	220	771	16	108	1115
Housing and Human Services	55	140	98	31	324
Library	22	36	64	498	620
Parks and Recreation	106	299	165	434	1004
Police	117	411	418	847	1793
Seattle Center	29	111	77	106	323
Water	98	182	151	193	624
City Total	1174	3054	1932	3562	9721

Figure C-8: Percentage of Employees by the Span of Their Work Unit

		Span 1	Range		
Department	>0-3	>3-6	>6-9	9+	Total
Administrative Services	18%	25%	31%	25%	100%
City Light	10%	23%	26%	40%	100%
Construction and Land Use	13%	51%	32%	4%	100%
Engineering	17%	31%	18%	34%	100%
Finance	13%	33%	10%	45%	100%
Fire	20%	69%	1%	10%	100%
Housing and Human Services	17%	43%	30%	10%	100%
Library	4%	6%	10%	80%	100%
Parks and Recreation	11%	30%	16%	43%	100%
Police	7%	23%	23%	47%	100%
Seattle Center	9%	34%	24%	33%	100%
Water	16%	29%	24%	31%	100%
City Total	12%	31%	20%	37%	100%

Addendum D Addendum D

# **Permanent Employees Supervised by Management Layers**

The following table lists the number of permanent employees supervised by each layer of management in departments. Layer one is supervised by department directors. For example, the Superintendent of City Light supervises 10 people.

Figure D-1: Permanent Employees Supervised by Each Layer of Management

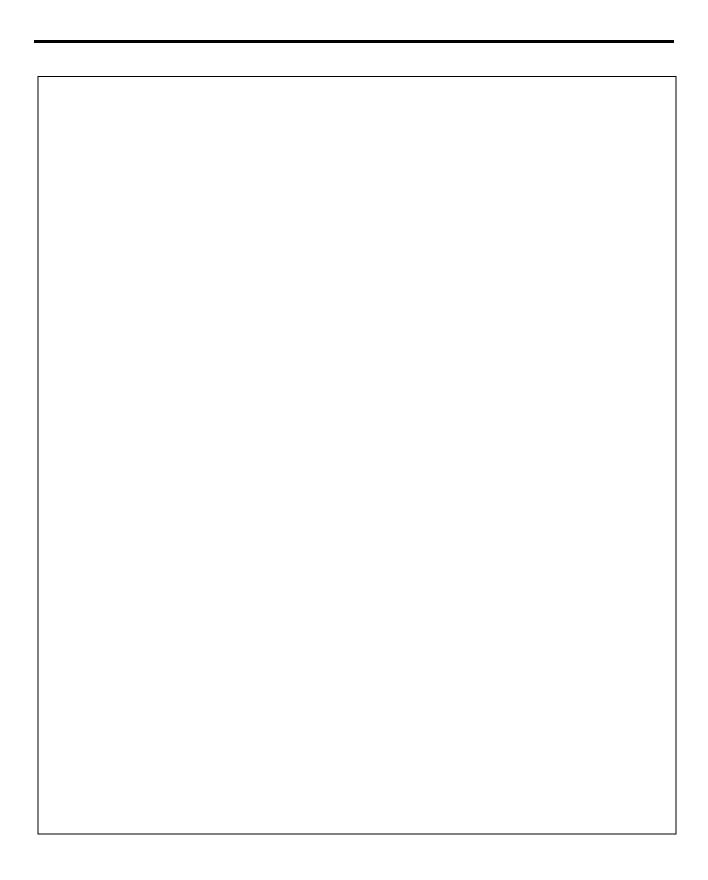
	Depar	tmental Lay	er - Departn	nent Heads l	Manage Emp	oloyees in L	ayer 1	
Department	1	2	3	4	5	6	7	Total
Administrative Services	7	39	98	176	144	4	-	468
City Light	10	55	188	639	755	243	25	1,915
Construction and Land Use	7	28	89	157	-	-	-	281
Engineering	6	33	94	242	347	344	-	1,065
Finance	11	42	74	62		-	-	189
Fire	4	21	62	147	150	731	-	1,115
Housing and Human Services	7	33	66	111	90	11	6	324
Library	7	9	43	501	60	-	-	620
Parks and Recreation	13	52	195	610	134	-	-	1,004
Police	11	43	122	303	1,313	1	-	1,793
Seattle Center	8	31	82	69	109	24	-	323
Water	11	38	108	236	116	115	-	624
Citywide Total	102	424	1,221	3,253	3,218	1,473	31	9,721

- Bower, Catherine D. "Teetering on the Brink." Working Smart (May 1995), p. 1.
- Brown, Jean Marie. "Restructuring Shifts Duties, Cuts City Jobs." *The Charlotte Observer* (March 4, 1993), pp. 1c-4c.
- Rightsizing Update. City of Charlotte, North Carolina (1992-1993), various issues.
- Eccles, Tony. "Brief Case: De-Layering Myths and Mezzanine Management." *Long Range Planning*, vol. 4, no. 106 (August, 1992), pp. 105-107.
- Firstenburg, Paul. "Downsizing: What's Your Game Plan?" *Management Review*, vol. 82. no. 11 (November, 1993), pp. 46-52.
- Fraser, Ronald. "The Dangers of a 'Flattened' Bureaucracy." *Governing*, vol. 7, no. 7 (April, 1994), pp. 10-11.
- Hammer, Michael and Champy, James. <u>Reengineering the Corporation.</u> New York: Harper Business, 1993.
- Hattrup, George P., and Kleiner, Brian H. "How to Establish the Proper Span of Control for Managers." *Industrial Management*, vol. 35, no. 6 (Nov-Dec, 1993), pp. 28-29.
- Janger, Allen. *Measuring Managerial Layers and Spans*. Conference Board Research Bulletin 237. New York: The Conference Board, 1993.
- Management Study: Span of Control. King County (Washington) Auditor's Office, Seattle, 1994.
- Lorinc, John. "Managing When There's No Middle." *Canadian Business* (June, 1991), pp. 86-94.
- McClenahen, John S. "Managing More People in the '90s." *Industry Week*, vol. 238, no. 6 (March 20, 1989), pp. 30-38.
- Moe, Robert C. "The 'Reinventing Government' Exercise: Misinterpreting the Problem, Misjudging the Consequences." *Public Administration Review*, vol. 54, no. 2 (March-April 1994), pp. 111-122.
- National Commission on the State and Local Public Service. "Hard Truths/Tough Choices." *Governing* (August, 1993), pp. 48-56.
- Nelson, Reed E. "Common Sense Staff Reduction." *Personnel Journal*, vol. 67, no. 8 (August 1988), pp. 50-57.
- Oregon Works: Assessing the Worker Training and Work Organization Practices of Oregon Employees. Oregon Economic Development Department, 1993.

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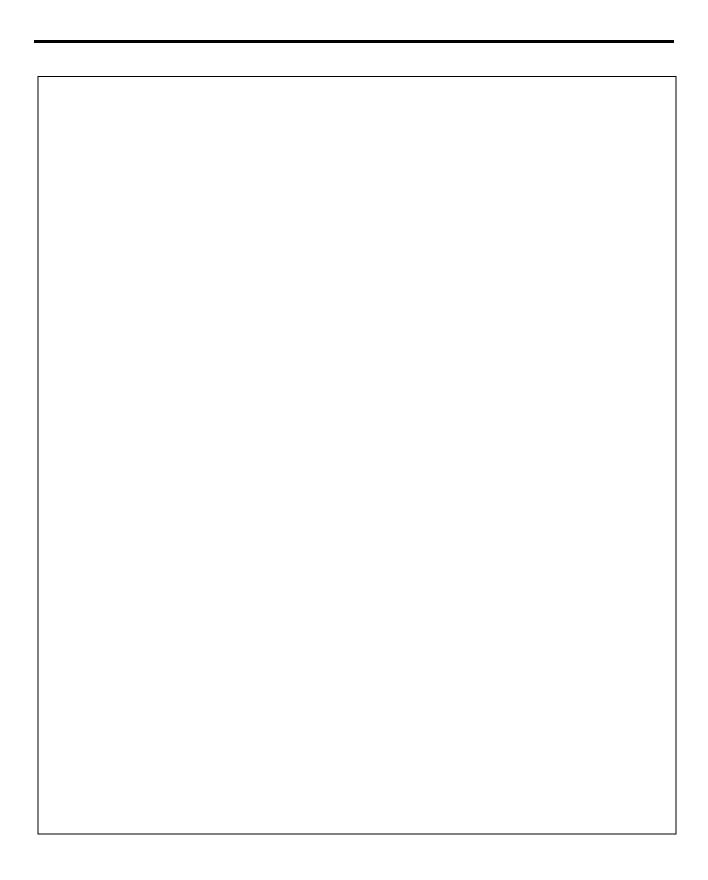
# **Bibliography**

- Peters, Tom. "Sound Off." On Achieving Excellence (April, 1994), pp. 10-11.
- City of Portland Span of Control Study. Portland (Oregon) Audit Services Division, Portland, 1994.
- Shoop, Tom. "Targeting Middle Managers." *Governing Executive*, vol. 25, no. 1 (January, 1994), pp. 10-16.
- Smither, Robert D. "The Return of the Authoritarian Manager." *Training* (November, 1991), pp. 40-44.
- Tomasko, Robert. <u>Downsizing: Reshaping the Corporation for the Future</u>. New York: American Management Association, 1993.
- Tomasko, Robert. <u>Rethinking the Corporation: The Architecture of Change</u>. New York: American Management Association, 1993.
- White, O. Wendell, Syfert, Pam and Cooke, David. "Rightsizing in Charlotte, North Carolina." *Government Finance Review*, vol. 10, no. 6 (December, 1994), pp. 7-10.
- Williams, Ed. "A Lean City Budget." The Charlotte Observer (June 25, 1992).
- Williams, Ed. "Rightsizing Makes Sense." *The Charlotte Observer* (March 4, 1993), p. A8.
- Wilson, James Q. <u>Bureaucracy: What Government Agencies Do and Why They Do It</u>. Basic Books, 1989.
- Workforce Reductions: Downsizing Strategies Used in Selected Organizations. General Accounting Office, 1995. (GAO/GGD-95-54).



Addendum F Addendum F

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Addendum F Addendum F

Om	ce of Manag	ement and	Planning's 1	 Our Augit	Keport

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Your feedback helps us do a better job. If you could please take a few minutes to fill out the following information for us, it will help us assess and improve our work.

## Report: Ratio of Staff to Managers in City Government (January 25, 1995)

Please rate the following elements of this report by checking the appropriate box:

	Too Little	Just Right	Too Much
Background			
Information			
Details			
Length of Report			
Clarity of Writing			
Potential Impact			

uggestions for our report format:
uggestions for future studies:
Other comments, thoughts, ideas:
Name (Optional):
hanks for taking the time to help us.

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